

## Drawings

Fig. 1a

B-B contact

E-B contact

Fig. 1b

Transmittance

EB contact

BB contact

Longitudinal wave

Melting time point

Transverse wave

Current time in [ms]

Fig. 1c

Transmittance

Contact influences

Melting time point

Formation of the welding spot

Current time in [ms]

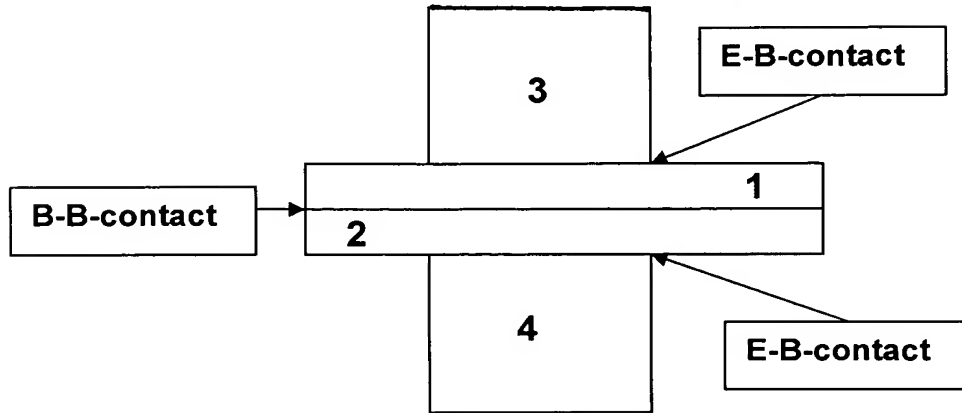
Fig. 3

1<sup>st</sup> welding

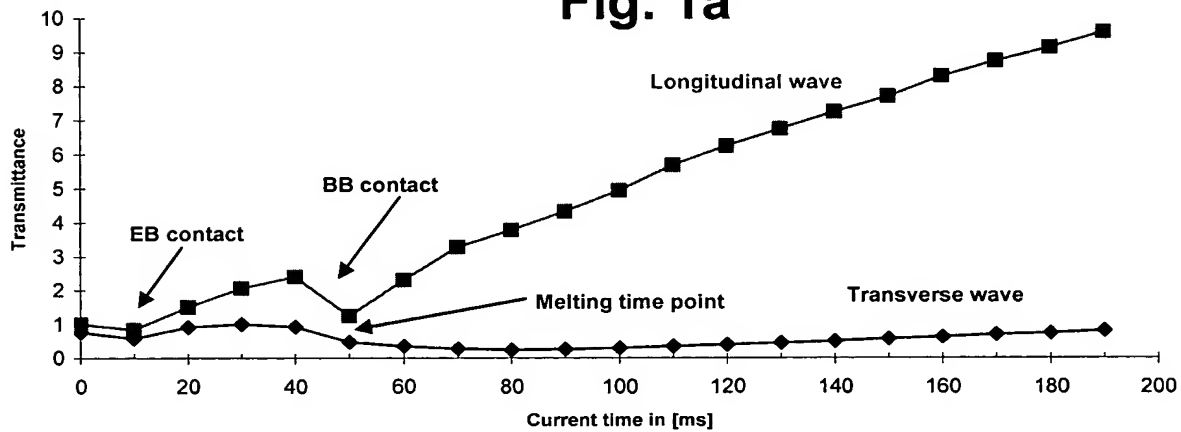
2<sup>nd</sup> welding

Current time

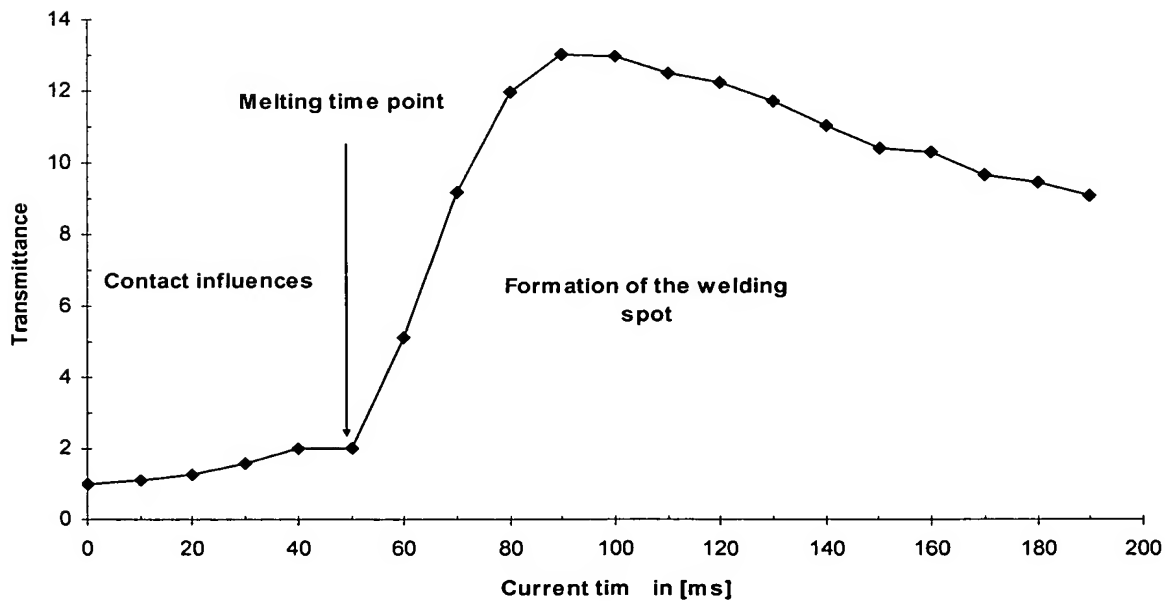
Effective time



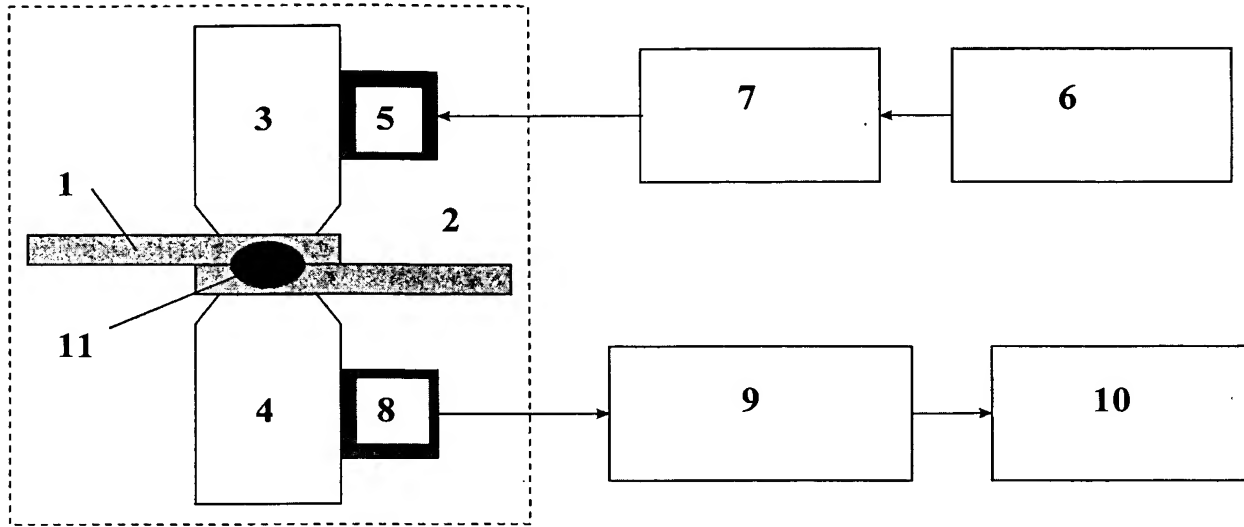
**Fig. 1a**



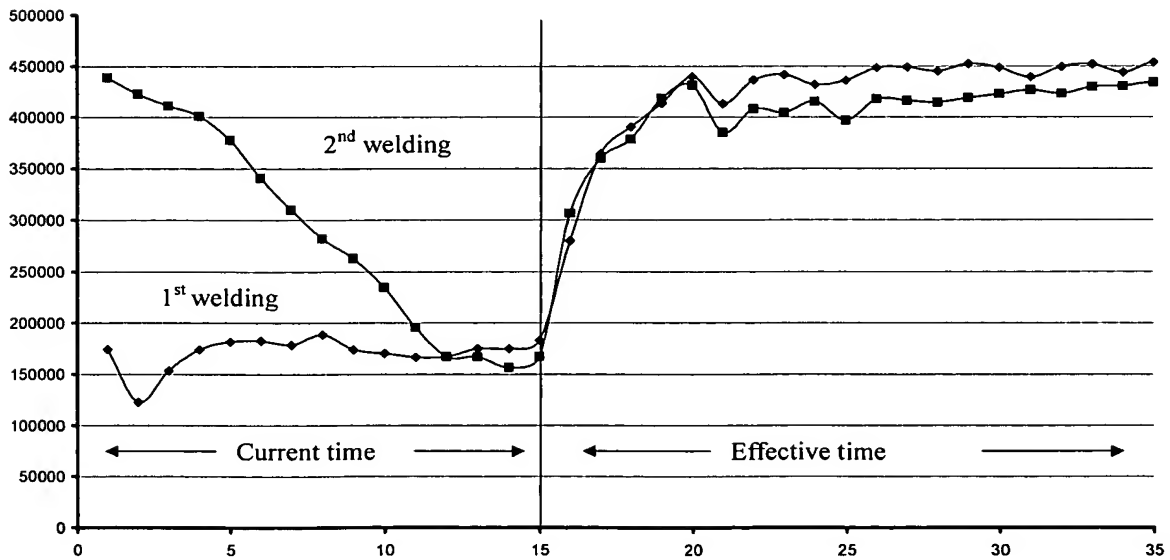
**Fig. 1b**



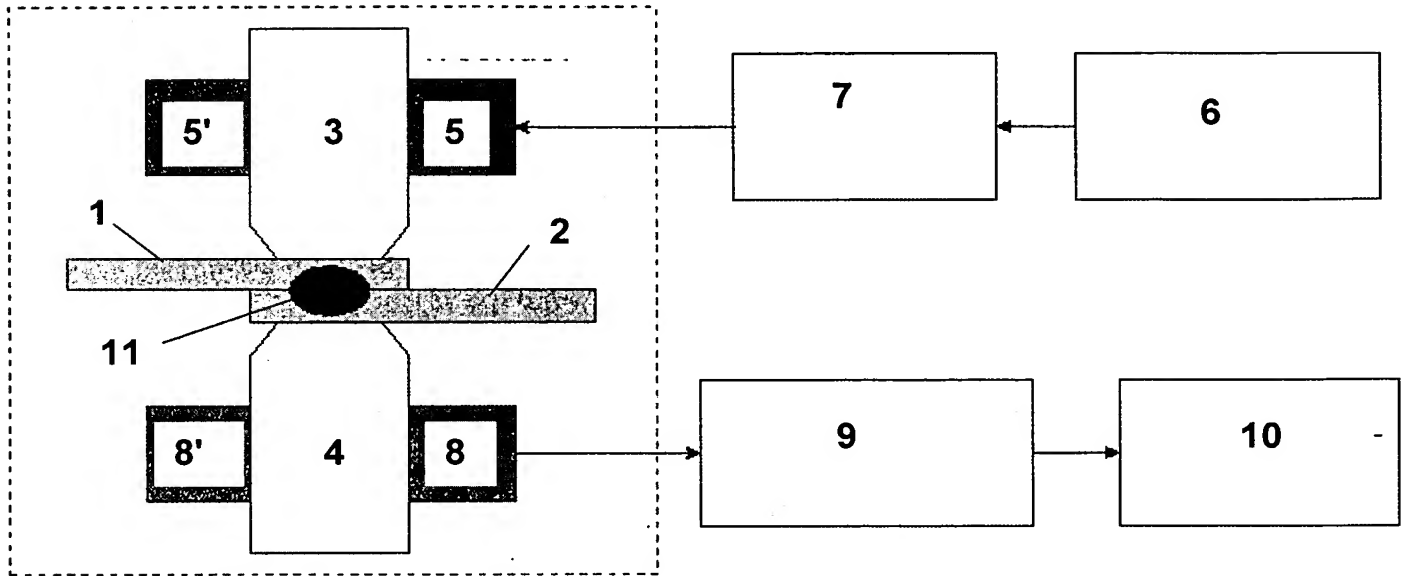
**Fig. 1c**



**Fig. 2**



**Fig. 3**



**Fig. 4**